

STORAGE

FAQ

Q What is a RAM disk and should I be using one?

A Your PC can use a portion of its RAM to store files as a hard disk would, providing considerably faster access to them. This is called a RAM disk. You can create one with a software utility, such as Cenatek's RAMDisk. However, if your PC doesn't have much memory, a large RAM disk could compromise your PC's performance. What's more, if you turn off or restart your PC, you will lose any data stored on a RAM disk.

RAM disks should be used primarily to store files that applications access frequently. As RAM is faster to access than a hard disk, programs that use these files should run faster. Examples include your browser's cache, Photoshop's temp files and Windows' swap file.

The RAM required to create a RAM disk could be used to boost performance in other ways, such as running more programs at once, so most people won't need to use a RAM disk. For more information on RAM disks, visit www.cenatek.com/User_manual/RAMDiskXP_Users_Manual.html#1.

Alan Lu

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WESTERN DIGITAL MyBook Essential Edition 320GB

★★★★★

£120 inc VAT

Western Digital's MyBook 320GB is an attractive external hard disk. The case feels a bit cheap but, as the name suggests, it's about the size of a thick book. The Essential Edition we review here comes without any backup software, so you'll have to provide your own.

You have the option of setting the whisper-quiet MyBook to power up and shut down in sync with your PC to save power. Its results in our

large-files tests were consistent with those of other USB Hi-Speed hard disks, but performance in our small-files test was let down by poor writing times, so tasks such as backing up system files will be slow.

We were impressed by the low cost per gigabyte of 38p. Despite the lack of backup software and poor performance with small files, the MyBook is great value.

Alan Lu



SUMMARY

- ✓ Excellent value
- ✓ Attractive design
- ✗ Slow at writing small files

EXTERNAL HARD DISK 320GB capacity, USB Hi-Speed interface, AC powered
PART CODE WDG1U3200
SUPPLIER www.savastore.com
DETAILS www.westerndigital.com

PERFORMANCE (see page 58)

Large files	25.4MB/s
Small files	6.2MB/s

HITACHI TravelStar 7K100

★★★★★

£135 inc VAT

While USB hard disks are useful for sharing and backing up data, they are not ideal as a permanent companion to your notebook. Not only do they occupy one or two USB ports, their read/write performance can also be slow.

Hitachi's TravelStar 7K100 is an internal 100GB hard disk for laptops with a spin speed of 7,200rpm; most notebook drives spin at 4,200rpm or 5,400rpm. Compared with a 5,400rpm Seagate Momentous hard disk, the TravelStar was almost 30



per cent faster in our large files test and just over 30 per cent faster in our small files test. However, the TravelStar also shaved 10 minutes off our test notebook's battery life.

If you simply want more space for office documents and music files a 5,400rpm hard disk is a cheaper option, but for the best performance the TravelStar is a good buy.

Alan Lu

SUMMARY

- ✓ Fast performance
- ✓ Well priced
- ✗ Reduces laptop battery life

INTERNAL HARD DISK 2½" internal hard disk, 100GB capacity, 93GB formatted capacity (NTFS), PATA interface, 7,200rpm spin speed
PART CODE HTS721010G9AT00/OA25015
SUPPLIER www.techstore.co.uk
DETAILS www.hitachigst.com

PERFORMANCE (see page 58)

Large files	42.2MB/s
Small files	11.9MB/s

Also consider...

ASUS DRW-1608P2S

★★★★★

£35 inc VAT

PRICE CUT!



Asus's DRW-1608P2S is very fast at writing

two-layer DVDs and is one of the few writers we've seen able to burn both DVD-R DL and DVD+R DL at 8X. It didn't do as well writing DVD+RW discs but otherwise held its own in our other tests. DVD-RAM is also supported.

An extensive software bundle consists of Nero Express 6, Ulead DVD MovieFactory and PowerDVD 6. The DRW-1608P2S is a fine choice thanks to its low price, good two-layer performance and generous software bundle.



INTERNAL DVD WRITER 16X DVD-R, 16X DVD+R, 6X DVD-RW, 8X DVD+RW, 8X DVD-R DL, 8X DVD+R DL, 5X DVD-RAM, 40X CD-R, 32X CD-RW PART CODE DRW-1608P2S
SUPPLIER www.dabs.com DETAILS <http://uk.asus.com>

- ✓ Fast when writing two-layer discs
- ✗ Sluggish DVD+RW writing

FULL REVIEW May 2006

MAXTOR Shared Storage Plus 500GB

★★★★★

£275 inc VAT

PRICE CUT!



Maxtor's Storage Plus can be used as a server for any UPnP media players. Read and write performance is average,

but setting up users and groups access permissions is straightforward. The Storage Plus is brimming with features and is great value if you don't need Gigabit Ethernet performance.



NETWORK STORAGE DEVICE 500GB hard disk, 10/100Mbit/s network connection, two USB ports PART CODE H24R500
SUPPLIER www.morecomputers.co.uk DETAILS www.maxtor.com

- ✓ Excellent price
- ✗ No Gigabit Ethernet

FULL REVIEW Jun 2006

PLEXTOR PX-760A

★★

£77 inc VAT

SONY DW-G120A

★★★★

£32 inc VAT

You're spoilt for choice when choosing an internal DVD writer. The newest models claim to be even faster than their predecessors, but it's often difficult to tell whether these claims of faster writing speeds will actually save you time when burning DVDs. We've put two of the latest drives through their paces to see if they are worth your hard-earned cash.

Plextor claims that its PX-760A can write to single-layer DVDs at 18X. We were disappointed to discover that, even when using Plextor's own media, the PX-760A is far off the pace for both DVD+R and DVD-R, taking just under six-and-a-half minutes to fill each disc. Two-layer DVD writing was also disappointing, taking around 22 minutes and 30 seconds to write a disc. Instead of the claimed 10X, we could burn DVD+R DL discs at only half this speed. We were also unable to write to DVD-R DL discs at the quoted 6X, although the drive was closer to this speed.

At first glance, the bundled software seems very generous, including useful titles such as Nero Recode for squeezing an 8.5GB DVD movie on to a 4.7GB disc. Sadly, many of these products, including Recode, are actually demo versions that expire after 30 days. If you are concerned about protecting your privacy, though, the included PlexEraser utility for making burned discs unreadable is useful.

Unlike the PX-760A, Sony's DW-G120A is an OEM drive, so it doesn't come with any bundled software or a PATA cable for connecting to your PC. The DW-G120A also supports DVD-RAM, which the PX-760A doesn't, although we were more interested in how quickly it could write to the more common DVD formats.

The DW-G120A wrote a full single-layer DVD in just over six minutes. This is quicker than the PX-760A, but still short of the claimed 16X writing speed. When writing two-layer DVDs, the DW-G120A took nearly half an hour to fill a disc, which is closer to its stated 4X for DVD-R DL discs than its claimed 8X for DVD+R DL discs.

Plextor's PX-760A is a disappointing DVD writer. While it's quicker at writing two-layer DVDs than Sony's DW-G120A, its single-layer writing speeds were slower than Sony's and way off Plextor's promised 18X speed. It also costs more than twice as much as the DW-G120A.

Despite the absence of any software, the DW-G120A is a better buy than the PX-760A. For just a few pounds more, though, our 'Also consider...' choice, the Asus DRW-1608PS2, is better value. It is fast at recording single-layer DVDs, quicker when writing two-layer DVDs and comes with a generous software bundle.

Alan Lu

▼ Plextor PX-760A

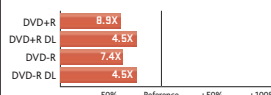


SUMMARY

- ✓ Disc eraser deletes DVDs
- ✗ Bundled with demo software
- ✗ Disappointing performance

INTERNAL DVD WRITER 18X DVD-R, 18X DVD+R, 6X DVD-RW, 8X DVD+RW, 6X DVD-R DL, 10X DVD+R DL, 48X CD-R, 24X CD-RW
PART CODE PX-760A/T3
SUPPLIER www.techstore.co.uk
DETAILS www.plextor.be

PERFORMANCE (see page 58)



▼ Sony DW-G120A

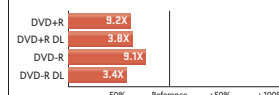


SUMMARY

- ✓ Cheap
- ✗ Slow to write discs
- ✗ No software in the box

INTERNAL DVD WRITER 16X DVD-R, 16X DVD+R, 6X DVD-RW, 8X DVD+RW, 4X DVD-R DL, 8X DVD+R DL, 5X DVD-RAM, 48X CD-R, 24X CD-RW
PART CODE DW-G120A
SUPPLIER www.microdirect.co.uk
DETAILS www.sonybiz.net

PERFORMANCE (see page 58)



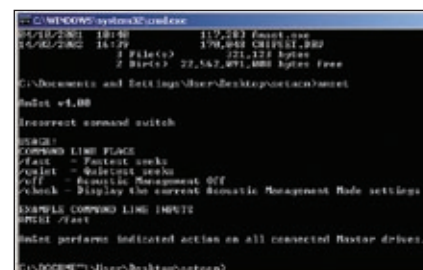
HOW TO... Silence a Maxtor hard disk

The clicking you hear when you access your hard disk is the sound of the stepper motor moving the read/write heads. This noise is unlikely to be a problem in most PCs, but if you've got a silent computer or media centre PC it can be very distracting. Maxtor's AMSet utility is designed to make your Maxtor hard disk quieter by adjusting the speed at which the read/write heads move. However, it slows read and write speeds in the process.

We used AMSet with Maxtor's DiamondMax 10 6V250F0 (for details of this device, turn to our hard disks round-up in *Labs*, page 86) and reduced its faint hum to a barely audible whisper. The impact on speed was minor, especially when reading and writing small files. Before we used AMSet, the 6V250F0 averaged 63MB/s in our large files test and 13.27MB/s in our small files test. Using AMSet's quietest setting, the 6V250F0 averaged 56.1MB/s for large files and 12.87MB/s for small files.

To run AMSet on your PC, you'll need a Maxtor hard disk, a floppy drive and two blank floppy disks.

- 1** Download a DOS 6.22 disk image from www.bootdisk.com/bootdisk.htm. Follow the instructions in the download for creating your DOS boot floppy. Copy command.com from the floppy disk to your hard disk.
- 2** Download the AMSet installer from http://maxtor.custhelp.com/cgi-bin/maxtor.cfg/php/enduser/maxtor_EULA.php?setacm.exe.
- 3** Unzip the downloaded file. This should reveal a folder called amset. Inside this folder are two files, AMSet and CHIPSET. Copy these two folders and command.com to a second floppy.
- 4** Reboot your PC with the DOS floppy in your floppy drive. Once your PC displays



an A:\> prompt, eject the DOS floppy and insert your AMSet floppy, type amset and press Enter. You'll see the above list of options for controlling the speed and noise of your disk.

- 5** Type amset /quiet to make your hard disk run as quietly as possible, type amset /off to return your hard disk to its original state and amset /check to display the current amset settings for your Maxtor hard disk.
- 6** Once you are happy with your AMSet settings, eject the floppy disk and reboot your PC.